AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1 (Currently Amended): A method of selecting a hop channel for use in a channel hopping communication system that includes a sequence of hop channels, wherein the sequence comprises a set of forbidden hop channels and a remaining set of allowable hop channels, the method comprising:

selecting a hop channel from the sequence as a function of a present phase;

if the selected hop channel is an allowable hop channel, then using the selected hop channel for communication during the present phase; and

if the selected hop channel is a forbidden hop channel, then:

using a time-varying parameter to select a substitute hop channel from the set of allowable hop channels by performing the steps of:

determining an index value, *i*, as a function of the time-varying parameter;

designating one of the allowable hop channels in the sequence of hop channels as a first hop channel;

starting at the first hop channel, processing the sequence of hop channels to determine an *i*th allowable hop channel in the sequence of hop channels; and

selecting the *i*th allowable hop channel for use as the substitute hop channel; and

using the substitute hop channel for communication during the present phase.

Claim 2 (Original): The method of claim 1, wherein the time-varying parameter is a clock value.

Claim 3 (Original): The method of claim 1, wherein the time-varying parameter and the present phase are derived from a same clock value.

Claim 4 (Original): The method of claim 1, wherein the time-varying parameter is a randomly selected value.

Claim 5 (Original): The method of claim 1, wherein the time-varying parameter is a pseudo-randomly selected value.

Claim 6 (Original): The method of claim 1, wherein at least one of the forbidden hop channels is associated with received interference from a jammer.

Claim 7 (Original): The method of claim 1, wherein at least one of the forbidden hop channels is reserved for use by a communication system that is not the channel hopping communication system.

Claim 8 (Original): The method of claim 1, further comprising the step of dynamically determining the set of forbidden hop channels, whereby the set of forbidden hop channels varies over time.

Claim 9 (Canceled)

Claim 10 (Currently Amended): The method of claim ~~9~~ 1, wherein the step of ~~forming~~ determining the index value as a function of ~~from~~ the time-varying parameter comprises determining the expression:

$$index\ value = \mathrm{mod}(time\text{-}varying\ parameter, N2) + \mathrm{BASE\ VALUE},$$

where mod (j,k) denotes j modulo k, N2 is the number of allowable hop channels in the sequence of allowable chop channels and BASE VALUE represents an index value of the first allowable hop channel in the sequence of allowable hop channels.

Claim 11 (Canceled)

Claim 12 (Currently Amended): The method of claim 1 ~~11~~, wherein the first hop channel is the first hop channel in the sequence of hop channels.

Claim 13 (Currently Amended): The method of claim 1 ~~11~~, wherein:

the first hop channel is a first hop channel after a last forbidden hop channel in the sequence of hop channels; and

the step of processing the sequence of hop channels to determine an *i*th allowable hop channel in the sequence of hop channels wraps around to the start of the sequence of hop channels when *i* is greater than the number of hop channels following the last forbidden hop channel in the sequence of hop channels.

Claim 14 (Currently Amended): The method of claim 1 ~~11~~, wherein the step of processing the sequence of hop channels to determine an *i*th allowable hop channel in the sequence of hop channels comprises the steps of:

starting at the first hop channel and continuing with each successive hop channel in the sequence of hop channels, determining whether the hop channel is an allowable hop channel; and

stopping when an *i*th allowable hop channel has been identified in the sequence of hop channels.

Claim 15 (Currently Amended): The method of claim 1 ~~11~~, further comprising the step of:

for each of the hop channels in the sequence of hop channels, determining a gap count that represents how many forbidden hop channels are in the sequence of hop channels from the first hop channel up to and including said each of the hop channels;

and wherein the step of processing the sequence of hop channels to determine an *i*th allowable hop channel in the sequence of hop channels comprises the steps of:

(a) using the index value plus a previous gap count to select one of the hop channels from the sequence of hop channels; and

(b) if the selected hop channel is associated with a present gap count that is equal to the previous gap count, then using the selected hop channel as the substitute hop channel, otherwise setting the previous gap count equal to the present gap count and repeating steps (a) and (b).

Claim 16 (Currently Amended): A hop channel selector for use in a channel hopping communication system that includes a sequence of hop channels, wherein the sequence comprises a set of forbidden hop channels and a remaining set of allowable hop channels, the hop channel selector comprising:

logic configured to select a hop channel from the sequence as a function of a present phase;

logic configured to use the selected hop channel for communication during the present phase if the selected hop channel is an allowable hop channel; and

logic configured to use a time-varying parameter to select a substitute hop channel from the set of allowable hop channels and to use the substitute hop channel for communication during the present phase if the selected hop channel is not an allowable hop channel, wherein the logic configured to use a time-varying parameter to select a substitute hop channel from the set of allowable hop channels comprises:

logic configured to determine an index value, *i*, as a function of the time-varying parameter;

logic configured to designate one of the allowable hop channels in the sequence of hop channels as a first hop channel;

logic configured to process the sequence of hop channels, starting at the first hop channel, to determine an *i*th allowable hop channel in the sequence of hop channels; and

logic configured to select the *i*th allowable hop channel for use as the substitute hop channel.

Claim 17 (Original): The hop channel selector of claim 16, wherein the time-varying parameter is a clock value.

Claim 18 (Original): The hop channel selector of claim 16, wherein the time-varying parameter and the present phase are derived from a same clock value.

Claim 19 (Original): The hop channel selector of claim 16, wherein the time-varying parameter is a randomly selected value.

Claim 20 (Original): The hop channel selector of claim 16, wherein the time-varying parameter is a pseudo-randomly selected value.

Claim 21 (Original): The hop channel selector of claim 16, wherein at least one of the forbidden hop channels is associated with received interference from a jammer.

Claim 22 (Original): The hop channel selector of claim 16, wherein at least one of the forbidden hop channels is reserved for use by a communication system that is not the channel hopping communication system.

Claim 23 (Original): The hop channel selector of claim 16, further comprising logic configured to dynamically determine the set of forbidden hop channels, whereby the set of forbidden hop channels varies over time.

Claim 24 (Canceled)

Claim 25 (Currently Amended): The hop channel selector of claim ~~24~~ 16, wherein the logic configured to ~~form the~~ determine an index value ~~from~~ as a function of the time-varying parameter comprises logic configured to determine the expression:

$$\textit{index value} = \text{mod}(\textit{time-varying parameter}, \text{N2}) + \text{BASE VALUE},$$

where mod (j,k) denotes j modulo k, N2 is the number of allowable hop channels in the sequence of allowable chop channels and BASE VALUE represents an index value of the first allowable hop channel in the sequence of allowable hop channels.

Claim 26 (Canceled)

Claim 27 (Currently Amended): The hop channel selector of claim ~~26~~ 16, wherein the first hop channel is the first hop channel in the sequence of hop channels.

Claim 28 (Currently Amended): The hop channel selector of claim ~~26~~ 16, wherein:

the first hop channel is a first hop channel after a last forbidden hop channel in the sequence of hop channels; and

the logic configured to process the sequence of hop channels to determine an *i*th allowable hop channel in the sequence of hop channels is configured to wrap around to the start of the sequence of hop channels when *i* is greater than the number of hop channels following the last forbidden hop channel in the sequence of hop channels.

Claim 29 (Currently Amended): The hop channel selector of claim ~~26~~ 16, wherein the logic configured to process the sequence of hop channels to determine an *i*th allowable hop channel in the sequence of hop channels comprises:

logic configured to:

determine, starting at the first hop channel and continuing with each successive hop channel in the sequence of hop channels, whether the hop channel is an allowable hop channel; and

stop when an *i*th allowable hop channel has been identified in the sequence of hop channels.

Claim 30 (Currently Amended): The hop channel selector of claim ~~26~~ 16, further comprising:

logic configured to determine a gap count for each of the hop channels in the sequence of hop channels, wherein the gap count represents how many forbidden hop channels are in the sequence of hop channels from the first hop channel up to and including said each of the hop channels;

and wherein the logic configured to process the sequence of hop channels to determine an *i*th allowable hop channel in the sequence of hop channels comprises logic configured:

(a) to use the index value plus a previous gap count to select one of the hop channels from the sequence of hop channels; and

(b) to use the selected hop channel as the substitute hop channel if the selected hop channel is associated with a present gap count that is equal to the previous gap count, otherwise to set the previous gap count equal to the present gap count and repeating operations (a) and (b).